

What is claimed is:

1. An information processing apparatus which creates and executes a thread by request from an application program, comprising:

5 a thread-creation-request receiving unit which receives from said application program a request for creation of a thread;

10 a thread creation unit which creates said thread in response to said request received by said thread-creation-request receiving unit;

a first thread execution unit which executes said thread created by said thread creation unit;

15 a thread-creation-request holding unit which holds said request received by said thread-creation-request receiving unit, when said thread creation unit fails in creation of said thread; and

a second thread execution unit which executes processing corresponding to said request held by said thread-creation-request holding unit.

20

2. An information processing apparatus according to claim 1, wherein, when execution of another thread by said first thread execution unit is completed, said second thread execution unit executes said processing corresponding to said request held by said thread-creation-request holding unit, by reusing an arrangement which is provided for supporting and managing said another thread,

without newly creating a thread in response to said request held by said thread-creation-request holding unit.

3. A method for creating and executing a thread by
5 request from an application program, comprising the steps
of:

(a) receiving from said application program a request for creation of a thread;

10 (b) creating said thread in response to said request received in said step (a);

(c) executing said thread created in said step (b);

(d) holding said request received in said step (a) when the operation of said step (b) fails; and

15 (e) executing processing corresponding to said request held in said step (d).

4. A method according to claim 3, wherein the operation in said step (e) is performed when execution of
20 another thread is completed, by reusing an arrangement which is provided for supporting and managing said another thread, without newly creating a thread in response to said request held in said step (d).

25 5. A computer-readable storage medium storing a program which is to be executed by a computer, and creates and executes a thread by request from an application

program, said program makes said computer realize:

 a thread-creation-request receiving unit which receives from said application program a request for creation of a thread;

5 a thread creation unit which creates said thread in response to said request received by said thread-creation-request receiving unit;

 a first thread execution unit which executes said thread created by said thread creation unit;

10 a thread-creation-request holding unit which holds said request received by said thread-creation-request receiving unit, when said thread creation unit fails in creation of said thread; and

15 a second thread execution unit which executes processing corresponding to said request held by said thread-creation-request holding unit.

6. A computer-readable storage medium according to claim 5, wherein, when execution of another thread by said 20 first thread execution unit is completed, said second thread execution unit executes said processing corresponding to said request held by said thread-creation-request holding unit, by reusing an arrangement which is provided for supporting and managing said another thread, 25 without newly creating a thread in response to said request held by said thread-creation-request holding unit.

ABSTRACT OF THE DISCLOSURE

An information processing apparatus which creates and executes a thread by request from an application program.

5 In the information processing apparatus, a thread-creation-request receiving unit receives from the application program a request for creation of a first thread, a thread creation unit creates the first thread in response to the request received by the thread-creation-request receiving

10 unit, a first thread execution unit executes the first thread created by the thread creation unit, a thread-creation-request holding unit holds the request received by the thread-creation-request receiving unit, when the thread creation unit fails in creation of the first thread, and a

15 second thread execution unit executes processing corresponding to the request held by the thread-creation-request holding unit. When execution of a second thread by the first thread execution unit is completed, the second thread execution unit may execute processing corresponding

20 to the request held by the thread-creation-request holding unit, by reusing an arrangement which is provided for supporting and managing the second thread, without newly creating the first thread in response to the request held by the thread-creation-request holding unit.